PATENT SPECIFICATION

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COMPLETE SPECIFICATION

Improvements in Tiles or Bricks for Covering and Protecting Electric Cables

I, THOMAS ALEC WHITEHOUSE, a British subject, of "Church Farm", Marston, Bedford, and MARSTON VALLEY BRICK COMPANY LIMITED, a British Company, of Blossoms Inn, 23, Lawrence Lane, London, E.C.2, do hereby declare the nature of this invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to tiles or bricks hereinafter called bricks of the type used for covering and protecting electric cables which are laid in the ground. These bricks are sometimes referred to as "electricity bricks", and it is known to provide them with convex and concave ends complementary to each other whereby interfitting and interchangeability between bricks is possible when laying.

The object of the present invention is to provide an improved electricity brick by which in general laying is simplified and greater protection is afforded to the electric cables, whilst the requirements of various governing Authorities are adhered to. In particular, the bricks may be turned about their interfitting ends through an appreciable angle in the same horizontal plane whilst always snugly fitting together with the avoidance of openings between bricks which might allow stones and earth to fall through and cause damage to the cable when the usual ramming operation is performed after the cable has been laid and covered. Whilst this flexibility of laying is possible, enabling a line of bricks to follow curves and angles without recourse to special cornering or curved bricks, longitudinal interlocking is provided for at all relative positions which adjacent bricks may assume.

According to the invention, a brick for the purpose set forth is construction to interfit with a like brick by means of complemental convex and concave opposite ends, and formed with recesses in its upper face to receive interlocking coupling ties adapted to bridge each pair of interfitting ends, at least one recess extending transversely of the brick to enable the tie to engage therein throughout a range of positions dependent upon the relative positions of the pair of bricks interlocked by said tie. For example, the recess for this purpose may be formed at the convex end of the brick and shaped as a groove following the curvature of the convexity.

Preferably, the coupling tie is a T-shape member having the end opposite the cross piece furnished with a downturned lug which is adapted to engage in a groove formed in the convex end of the brick and following the convex curvature, whilst the concave end of the brick is provided, at the centre, with a T-groove to receive the T-shape of the coupling tie.

Alternatively, the coupling tie may be a straight member with a downturned lug at each end, and in this case, the concave end of the brick, instead of having the T-groove, will be formed with a groove which is convex to the concavity to receive one of the lugs.

The bricks will be suitably cut away at the ends to enable the coupling ties to lie flush or below the surface of the bricks.

In order that the invention may be readily understood and carried into effect, an embodiment thereof will now be described by way of example with reference to the accompanying drawings in which:—

Figure 1 is a pictorial view of the improved electricity brick;

Figure 2 is a pictorial view of the coupling tie intended for the brick illustrated;

Figure 3 shows in plan a plurality of the improved bricks assembled and coupled together, and in particular illustrates the manner in which the bricks can be made to follow any desired curve without forming openings between the bricks; and

Figure 4 is a longitudinal section on the line IV—IV of Figure 3.

The brick comprises an elongated flat strip 1 of brick material, one end of which is convex as at 2 and the other end 3 is concave, the two ends being complementary so that two bricks can have their convex and concave ends interfitted and

may be adjusted angularly relatively to each without leaving openings between them. Figure 3 illustrates clearly this feature of the bricks according to the invention. In the embodiment, the ends 2 and 3 of the brick follow the curve of an arc of a circle having a radius equal to half the width of the brick. For coupling any two bricks together, a coupling tie member 4 of T-shape is provided, the end opposite the cross piece having a downturned lug 5. The two ends of the brick are grooved to receive this coupling tie, the convex end having a curved groove 6 which follows the curvature of convexity and at the centre of the concave end a T-shape groove 7 is formed, the groove being cut away to a depth which is at least as great as the thickness of the tie so that the latter will lie flush or below the top surface of the brick. The convex groove 6 receives the tie lug 5 and so that the tie shall lie flush with or below the top surfaces of two adjacent bricks, as seen in Figure 4, the convex end of each brick is cut away as at 8 around the tie-receiving groove 6 to form a recess or step 8*a* below the upper face of the brick at a depth at least as great as the thickness of the tie. The groove 6 extends below the surface of the step so that the tie 4 may lie on the step with the lug 5 projecting into and engaging the groove 6.

Electricity bricks made according to the present invention, apart from avoiding openings between bricks when laying, enable one standard brick and coupling tie to be employed both on bends as well as on the straight, and very flexible laying is possible since for example standard bricks of about ten or eleven inches in over-all length by about six inches wide can be accommodated to bends as small as two feet radius.

Having now particularly described and ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:—

1. A brick for the purpose set forth constructed to interfit with a like brick by means of complemental convex and concave opposite ends, and formed with recesses in its upper face to receive interlocking coupling ties adapted to bridge each pair of interfitting ends, at least one recess extending transversely of the brick to enable the tie to engage therein throughout a range of positions dependent upon the relative positions of the pair of bricks interlocked by said tie.

2. A brick according to Claim 1, wherein one recess is formed at the convex end of the brick to receive the coupling tie and is a groove shaped to follow the curvature of the convexity.

3. A brick according to Claims 1 or 2, wherein one recess is located at the centre of the concave end of the tile and is a T-shape groove formed to receive a correspondingly shaped portion of the coupling tie.

4. A brick according to Claims 1 and 2, characterised in that the convex end of each brick is cut away around the tie-receiving groove to form a recess or step below the upper face of the brick at a depth at least as great as the thickness of the tie, the groove for the tie extending below the surface of said step.

5. A brick constructed substantially as herein described and illustrated in Figure 1 of the accompanying drawings.

6. Bricks according to Claims 1 and 2 in combination with a coupling tie of T-shape having the end opposite the cross piece formed with a downturned lug.

Dated this 1st day of December, 1938.
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Fig.1.

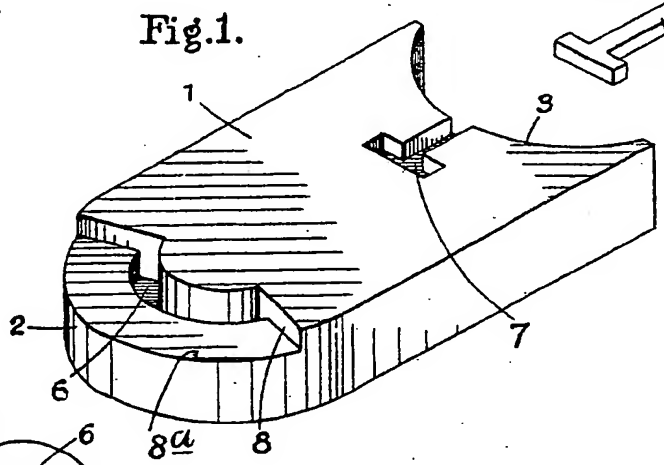


Fig.2.

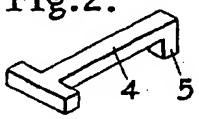


Fig.3.

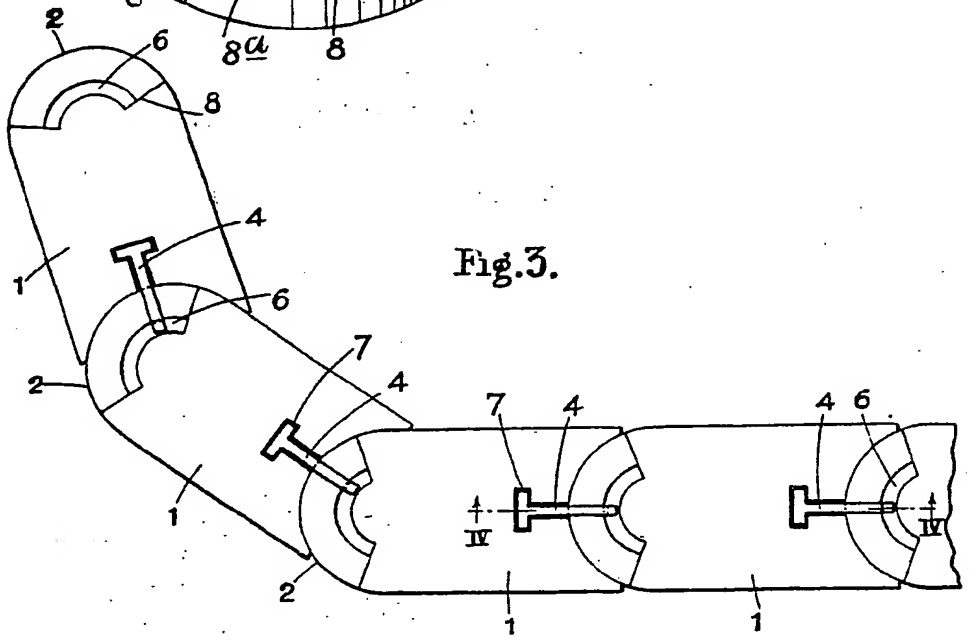
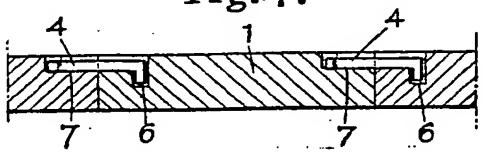


Fig.4.



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